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EC1321 Our Egg Marketing Job

J. W. Goble

F. E. Mussehl

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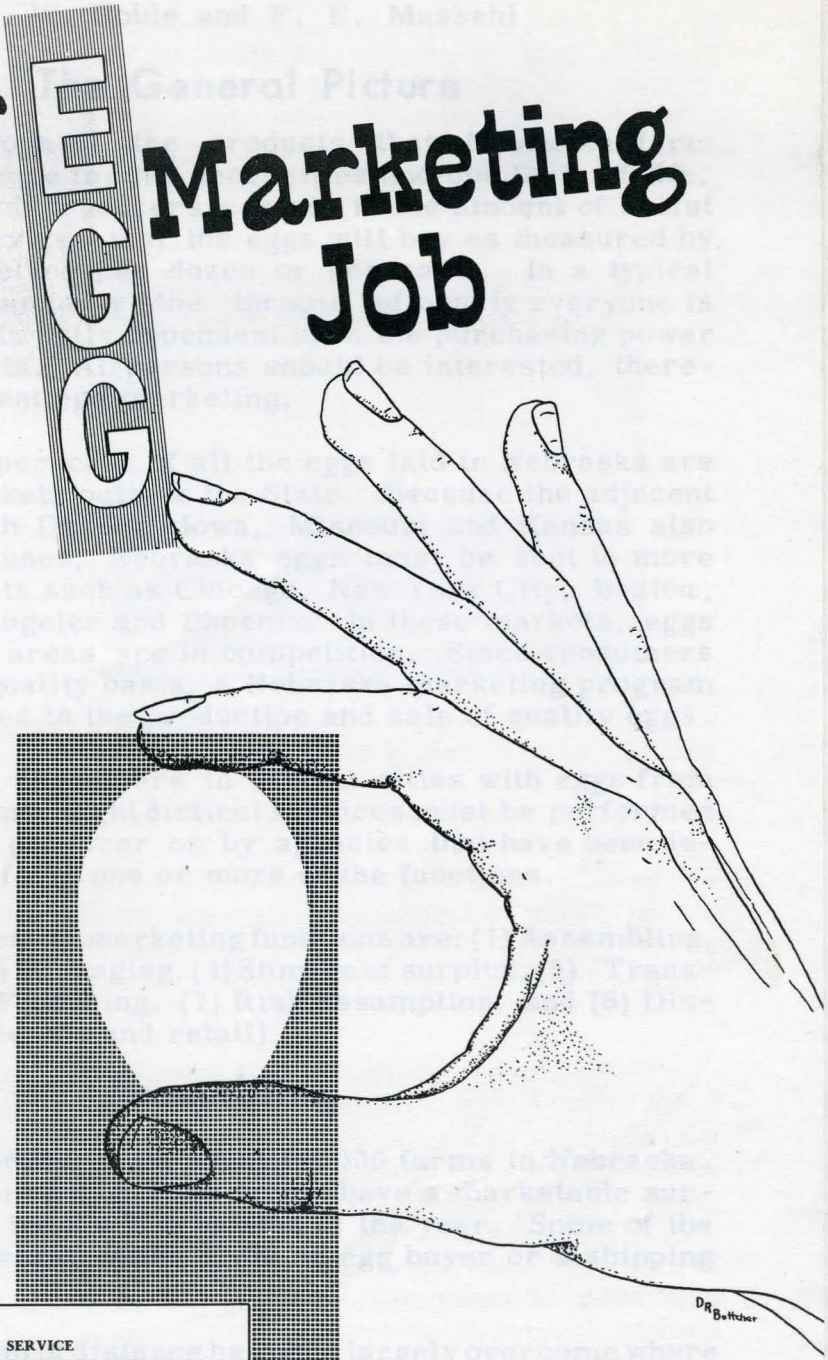
Our EGG Marketing Job



EXTENSION SERVICE
UNIVERSITY OF NEBRASKA COLLEGE OF AGRICULTURE
AND U. S. DEPARTMENT OF AGRICULTURE
COOPERATING
W. V. LAMBERT, DIRECTOR

OUR EGG MARKETING JOB

J. W. Goble and F. E. Mussehl

The General Picture

Eggs are one of the products that Nebraska farm families exchange for the necessities and comforts of life. The interest of producers centers in the amount of useful goods and services that the eggs will buy as measured by the price received per dozen or per case. In a typical Nebraska community the income of nearly everyone is directly or indirectly dependent upon the purchasing power of farm products. All persons should be interested, therefore, in efficient egg marketing.

About 60 per cent of all the eggs laid in Nebraska are shipped to markets outside the State. Because the adjacent states of South Dakota, Iowa, Missouri and Kansas also produce surpluses, Nebraska eggs must be sent to more distant markets such as Chicago, New York City, Boston, Detroit, Los Angeles and Phoenix. In these markets, eggs from various areas are in competition. Since consumers buy eggs on a quality basis, a Nebraska marketing program must be directed to the production and sale of quality eggs.

To supply consumers in distant cities with eggs from Nebraska farms, eight distinct services must be performed, either by the producer or by agencies that have been developed to perform one or more of the functions.

These essential marketing functions are: (1) Assembling, (2) Grading, (3) Packaging, (4) Storage of surplus, (5) Transportation, (6) Financing, (7) Risk assumption, and (8) Distribution (wholesale and retail).

Assembling

Eggs are produced on about 94,000 farms in Nebraska, and about 80 per cent of these farms have a marketable surplus during at least a few months of the year. Some of the farms are several miles from an egg buyer or a shipping point.

The problem of distance has been largely overcome where buying organizations operate route trucks through the country

to transport eggs directly from the farm. The "pickups" are generally made once or twice per week from each farm.

The most economical method of shipping eggs long distances is in refrigerator cars holding about 500 cases or in trucks of approximately the same capacity. Therefore, the eggs must be assembled into case lots and carload lots in order that they can be transported at the lowest possible cost. In order to be shipped even a short distance, eggs must be packed in a case to assure safe handling.

An increasing number of eggs are being picked up by route trucks directly from the farm.

Most farmers have a choice between selling eggs at a grocery store where they are paid by cash or "in trade", and selling them to produce dealers who pay cash for the products. The payment for eggs by the "in trade" method is generally acceptable to persons who sell only a few dozen eggs at one time. Frequently, a premium is offered to those who are willing to trade eggs for groceries.

The cost of assembling eggs from large flocks is less than from small flocks. A well managed flock of 400 to 500 hens will produce approximately a half case of eggs a day during most of the year. In areas where there is a concentration of large flocks, the procurement cost by route trucks is considerably reduced. The quality of eggs from the larger flocks is also generally higher than from small flocks since the large producer is more disturbed by low prices that result from quality deterioration.

Grading or Standardization

An increasing number of consumers are buying eggs on the basis of grade, and the price paid at any particular place and time is determined in part by the quality of the product as indicated by the grade. Discriminating purchasers are willing to pay the price necessary to obtain a quality product. Eggs of poorer quality are sold to consumers who are unwilling or unable to pay the higher price for which the best eggs sell. A widely accepted standard for grading eggs has been devised by the Production and Marketing Administration of the U. S. Department of Agriculture. The factors that are important in determining egg values are:

Exterior Qualities
- Size
- Shell cleanliness
- Shell soundness
- Uniformity of color
- Uniformity of shape

Interior Qualities
- Fullness (as determined by the size of the air cell)
- Condition of the yolk, including color and visibility
- Firmness of the albumen

The Production and Marketing Administration has proposed the following description for U. S. Grade A eggs:

Minimum requirements:

Shell, clean, unbroken, normal.

Air-cell. Two-eighths inch or less in depth, regular slightly wavy.

Yolk. Outline fairly well defined; practically free from defects and blemishes.

White. Reasonably firm, clear.

These standards can easily be attained for 80 per cent of the production of any well managed flock.

A dozen large eggs contain more food value than do a dozen small eggs. The size factor, therefore, is important although it has no relationship to quality. Eggs that average

24 ounces to the dozen are considered an ideal size, so cases and equipment are designed for this size.

Eggs that are uniform in size and shape have a greater appeal to the consumer than eggs that are not uniform. If small eggs are packaged with large ones, the difference in size is over-accentuated.

Cleanliness of the shell is important. Clean eggs appeal to the eye and to our ideas of sanitation. Because dirty eggs and washed eggs cannot be stored satisfactorily, clean eggs are particularly desired during the storage season. Clean eggs will usually bring from five to eight cents per dozen more than eggs of equal quality that have stained and dirty shells.

Eggs with cracked shells not only spoil quickly but often break and stain other eggs. This lowers the grade of the entire package.

Eggs of uniform color appeal to buyers. The popularity of white eggs on any market is due in part to the first impression made by the color. It is possible to secure uniformity of color with brown eggs, but only with considerable grading effort, because there are many different tints and shades of brown eggs.

The interior quality factors are more difficult to determine than the exterior factors, but they are equally important in grading. The color and condition of the yolk, the firmness of the albumen, and the size of the air cell are the important reflectors of interior quality. Many city consumers prefer eggs with light colored yolks. Yolk color is influenced by the ration.

The quality of both yolk and albumen is affected by temperature. Eggs should be stored in a cool place from the time they are taken from the nest until they are used for food. They keep best in a refrigerator where the temperature is close to the freezing point, but may be kept for a few days on the farm in a cool, clean cellar or cave.

Another cause of interior quality deterioration is the development of the embryo in fertile eggs. An embryo will start development at temperatures about 68° F. Fertile eggs held for three days in a room at an average temperature of

90 degrees will undergo so much development that blood will become evident, making the egg unfit for food. The production of infertile eggs does not solve all marketing problems, but it does aid in reducing losses.

Even with excellent management, there are always some small, dirty, cracked, or thin-shelled eggs which must be placed in one of the lower grades, although the interior may be of excellent quality. Some of the lower grade eggs can be used in the home, and the remainder can be sold locally.

Packaging

A standard egg case holding 30 dozen eggs is an economical and satisfactory package. Most cases are made of either cottonwood, spruce, or fir lumber, or from fiber. Fiber cases are tending to displace those made of wood except for long distance shipment or for packing eggs that are to be placed in cold storage. Cases are usually returned to the shipper when the distance to the terminal market is short. Those that are shipped from the Midwest to distant markets are not returned because the cost of returning the case is usually greater than the value of the case. When shippers haul eggs in their own trucks, used cases are frequently returned as a back haul which makes the cases relatively inexpensive. The cost of the case with its complement of flats and fillers is a part of the cost of marketing most Nebraska eggs.

Eggs being standardized and packed for shipment in a modern processing plant.

Honeycomb fillers, holding 36 eggs each and used in conjunction with a patented flat known as the "Mapes flat," have become standard equipment. The flats contain cushion cups, each of which holds one egg. Eggs should be placed in the fillers with the small end down. This gives the greatest protection at the weakest point of the shell, improves the appearance of the eggs in the case and places the egg in a position so that the air cell remains in the large end.

A recent development in egg packing is "oil processing." Eggs are processed by dipping in mineral oil. The oil reduces evaporation from the eggs, and aids in preventing the entrance of bacteria or mold-producing organisms. Dipping is done by machines at a cost of one to one and one-half cents per dozen.

Storing Eggs

The peak of egg production is reached during March, April and May. The months of low production are September, October and November. By storing eggs during the months of abundant production, supplies are available during the months of low production. Equalizing the supply of eggs aids in equalizing the price. The purchase of eggs for storage increases the price paid the producer during the months when production is largest and decreases the price that the consumer must pay during the season when production is light. The trend toward less seasonal production is reducing the importance of storage as a price stabilizer.

In some years the storage of eggs is profitable, but in other years stored eggs are sold at a loss. At the time eggs are placed in storage, no one can predict how strong the demand for eggs will be during the autumn, or the volume of eggs that will be produced during the fall months. Production during the late fall and early winter is dependent to some extent upon the weather.

Cold storage warehouses are usually cooled by mechanical refrigeration. Temperatures of from 29° to 32° F. are maintained for shell eggs. A relative humidity of 90 per cent is considered desirable.

Only clean, fresh eggs of high quality and packed in clean flats and fillers, should be stored. The quality of an egg is never improved during storage, but the quality of poor eggs may deteriorate noticeably. Washed eggs cannot be stored satisfactorily.

The cost of storage varies according to the number of cases stored under one ownership, and according to the length of time that the eggs are left in storage. A typical storage tariff is as follows:

	Handling charge	Monthly storage charge
39 cases and less--per case	19¢	11¢
40 cases or more--per case	14¢	8¢

In general, storage costs are somewhat lower in the Midwest, where most of the surplus eggs are produced, than in the larger markets where wage rates and real estate values are higher.

Transportation

The sections of the country that are deficient in egg production include the North Atlantic states, some of the southern states and the Southwest. About 20 per cent of the people of the United States live in cities of 100,000 or over in an area which has Boston, Buffalo, Pittsburgh, and Washington at the four corners. The farmers in this area produce relatively little grain. A large part of the grain fed to poultry and dairy cows in this region is shipped from other areas. The cost of shipping a carload of eggs from Omaha to New York City is materially less than the cost of shipping grain an equal distance to be fed to hens producing the eggs.

The freight rate on eggs in carload lots from Lincoln, Nebraska, to New York City is $2.07 per hundred, or a little more than 3 cents per dozen. Rates are slightly higher for less than carload lots.

Express shipments are not justifiable because of cost. Motor trucks have been adapted for long hauls in competition with refrigerated railroad cars.

Financing

Under normal conditions about 6,000,000 cases of eggs are in storage on the first of August. At the conservative valuation of $10 per case, the owners have $60,000,000 invested. Even in the ordinary movement of eggs to

market, someone must furnish the capital essential to ownership from the time the eggs leave the producer until they reach the ultimate consumer.

Warehouse receipts for eggs held in cold storage warehouses are accepted by banks as collateral. The maximum amount that a bank will loan is ordinarily about three-fourths of the value of the eggs stored. Loan rates vary to some extent, but in recent years have generally not exceeded six per cent a year.

Risk Assumption

The seventh marketing function is that of accepting the risk of ownership. Ownership of anything, anywhere, at any time carries with it the possibility of loss through price change, depreciation in quality, or destruction by fire or tornado. It is possible to shift some of the risks of ownership. Stored eggs may be insured against loss by fire or tornado or hedged against a falling market by selling eggs for future delivery. An owner of property must either bear the risk of ownership, or pay someone else for assuming the risk.

Selling

Market eggs are ordinarily transported to consuming markets in lots of about 500 cases. These are usually sold in carload or truckload lots to wholesale receivers who in turn sell the eggs to retailers in case lots, or in cartons holding one dozen eggs. The large retailer may need to buy ten or twenty cases of eggs to supply his trade for two or three days, whereas the smaller retailer may buy only one case or less at a time.

Both wholesaler and retailer must watch credits and collections, supply accounting service, and provide refrigeration.

The use of cartons for packing eggs sold at retail has increased in recent years. The cartons cost from one to two cents each, and make a satisfactory package. Usually the cartons are packed at the wholesale plant, but sometimes the retailer buys in case lots, and transfers the eggs to cartons.

Good eggs must be kept under refrigeration to maintain high quality. Most eggs are now retailed in cartons.

Summary

Marketing eggs does not consist merely of taking the eggs to the grocery store or the cream station. On the average, Nebraska eggs are shipped 500 miles or more before reaching the ultimate consumer. The marketing process includes the various services that are rendered to get the eggs to the consumers in good condition.

Every step in marketing is important to the egg producer, because the price he receives is the price the consumer pays, less transportation and handling costs. The consumer wants a quality product, so a less desirable product can be sold only at a lower price.

Improvements in marketing will come as rapidly as understanding and appreciation of the essential marketing services are developed. A study of marketing helps producers to discover weak points in the production program. The eggs purchased by a consumer cannot improve in quality after they arrive at the local assembly point. The most important consideration in any marketing program is to supply a product that consumers want.